

REMARKS

Rejections

Rejections under 35 U.S.C. § 103

Claims 1-15

Claims 1-15 stand rejected under 35 U.S.C. § 103(a) as being obvious over Hel-or, U.S. Patent No. 6,404,918 in view of Kimmel (IEEE Transactions on Image Processing, Col. 8, No. 9) and Ebel, U.S. Patent No. 5,717,781. Applicant respectfully submits that the combination does not teach or suggest each and every element of the invention as claimed in claims 1-15. In independent claims 1, 6 and 11, Applicant claims providing edge enhancements to increase edge detail of the captured raw image as part of a demosaicing process. The Examiner admits that Hel-or does not disclose enhancing edge detail as part of the demosaicing process and is relying on Kimmel and Ebel as disclosing that element.

Kimmel discloses reconstructing a digital image by first demosaicing and then enhancing the resulting image. The demosaicing step reconstructs the image using an edge-weighted interpolation to avoid interpolating across edges and to preserve edge detail. The enhancement step enhances the edges of the reconstructed image by inverting the color diffusion across the edge.

Ebel discloses analyzing an image of a contact lens to determine quality of contact lens. A CCD sensor captures the image and an image processing system corrects the image for known defects in the CCD sensor. The system enhances the edge detail of the lens in the corrected image using an edge enhancement operator. The system analyzes the lens quality based on the enhanced, corrected image.

However, because Kimmel discloses providing edge enhancements to the reconstructed image after the demosaicing step, Kimmel cannot be properly interpreted as disclosing increasing edge detail of the raw image as part of a demosaicing process. Furthermore, because Ebel does not disclose a demosaicing process, Ebel cannot teach or suggest an increase to edge detail of the raw image as part of a demosaicing process. As none of Hel-or, Kimmel, or Ebel teach or suggest this element as claimed in claims 1, 6

and 11, the combination cannot be interpreted as disclosing the claimed element. Therefore, the combination cannot render obvious Applicant's invention as claimed in claims 1, 6 and 11 and claims 2-5, 7-10 and 11-14 that depend on them and Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. § 103(a) over the combination.

Claims 16-20

Claims 16-20 stand rejected under 35 U.S.C. § 103(a) as being obvious over Hel-or in view of Kimmel, Ebel, and Lathrop et. al. US Patent No. 6,288,743. Applicant respectfully submits that the combination of Hel-or, Kimmel, Ebel, and Lathrop do not support a *prima facie* case of obviousness because the combination does not teach or suggest each and every limitation of Applicant's invention as claimed in claims 16-20. Claims 16-20 claim providing edge enhancements to increase edge detail of the captured raw image as part of a demosaicing process. Because Hel-or, Kimmel, and Ebel do not teach or suggest this limitation of claims 16-20, Lathrop must disclose at the least the missing element in order to have a proper *prima facie* case for claims 16-20.

However, because Lathrop applies edge enhancements to a full color image and not the raw image, Lathrop cannot be properly interpreted as disclosing providing edge enhancements to increase edge detail of the captured raw image as part of a demosaicing process. As none of Hel-or, Kimmel, Ebel, or Lathrop teach or suggest this element as claimed in claims 16-20, the combination cannot be interpreted as disclosing the claimed element. Therefore, the combination cannot render obvious Applicant's invention as claimed in claims 16-20 and Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. § 103(a) over the combination.

SUMMARY

Claims 1-20 are currently pending. In view of the foregoing amendments and remarks, Applicant respectfully submits that the pending claims are in condition for allowance. Applicant respectfully requests reconsideration of the application and allowance of the pending claims.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Eric Replogle at (408) 720-8300.

Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Applicant hereby requests such extension.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR
& ZAFMAN LLP

Dated: May 23, 2005



Eric S. Replogle
Registration No. 52,161

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA 90025-1026
(408) 720-8300